

周报20190526

工作

1. 晓冬和梁扬帆的毕业论文
2. 学习机器学习课程

之江大图

进展

1. 实现了简单的布局，在接入绘制中
2. 在搭服务器去接入朱博的布局算法

计划

1. 接入布局算法，实现要求下数量级数据的基础绘制
2. 增加交互功能

Idea

- 巫老师那边有几个人在准备投CHI。四维师兄说可以一起合作帮我们改写作。
- 目前没啥人机交互方面的想法，但是还是想赶这个DDL，而且有全职可以交流的师兄在，感觉是个很好的机会不想错过。

Paper Reading

1. Dynamic Network Embedding :An Extended Approach for Skip-gram based Network Embedding
 - 清华大学
 - IJCAI2018

2. Real-Time Streaming Graph Embedding Through Local Actions

- Texas A&M University, Samsung Research America
- WWW2019

3. GraphGAN: Graph Representation Learning with Generative Adversarial Nets

- 上交, 微软, 香港理工, 华中科大
- AAAI2018
- 代码: <https://github.com/hwwang55/GraphGAN>

4. Supporting Analysis of Dimensionality Reduction Results with Contrastive Learning

5. A Deep Generative Model for Graph Layout

Method	Parameter Ranges	Implementation
D3 [9]	link distance = [1.0, 100.0], charge strength = [-100.0, -1.0], velocity decay = [0.1, 0.7]	[8]
FA2 [49]	gravity = [1.0, 10.0], scaling ratio = [1.0, 10.0], adjust sizes = {true, false}, linlog = {true, false}, outbound attraction distribution = {true, false}, strong gravity = {true, false}	[4]
FM ³ [38]	force model = {new, fr}, galaxy choice = {lower mass, higher mass, uniform}, spring strength = [0.1, 1000.0], repulsive spring strength = [0.1, 1000.0], post spring strength = [0.01, 10.0], post repulsive spring strength = [0.01, 10.0]	[13]
sfdp [44]	repulsive force strength (C) = (0.0, 5.0], repulsive force exponent (p) = [0.0, 5.0], attractive force strength (mu) = (0.0, 5.0], attractive force exponent (mu_p) = [0.0, 5.0]	[68]

- 马老师组, 还是Oh-Hyun Kwon做的两篇图布局, 之前是2017VIS

